SEP 0 7 2001

Sheet	1	of	1

INFORMATION DISCLOSURE STATEMENT  (Use several shocts if necessary)  APPLICANT(S) Hajime AMANO et al.  FILING DATE March 28, 2001  U.S. PATENT DOCUMENTS  EXAMINER  DATE  NAME  CLASS SUB CLASS		3								
(Use several sheets if necessary)  APPLICANT(S) Hajime AMANO et al.  FILING DATE MARCH 28, 2001  U.S. PATENT DOCUMENTS  EXAMINER NITIAL  DOCUMENT NUMBER  DATE  DATE  FOREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  CLASS CLASS  TWO  FOREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  COUNTRY  CLASS CLASS  CLASS CLASS  CLASS CLASS  O'THER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  O'THER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  ATTENDATION OF THE PAGES (1994)  DATE CONSIDERED  STANDARD										
Hajime AMANO et al.  FILING DATE MARCH 28, 2001  U.S. PATENT DOCUMENTS  EXAMINER  DOCUMENT NUMBER  DATE  NAME  CLASS CLASC CLASS CLASS CLASS CLASS CLASS CLASS CLASC CLASS CLASS CLASC CLA	INFO	DRMATION DISCLOSURE STATEMENT								
U.S. PATENT DOCUMENTS  U.S. PATENT DOCUMENTS  EXAMINER INITIAL  DOCUMENT NUMBER  DATE  FOREIGN PATENT DOCUMENTS  FOREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  CLASS  SUB CLASS  CLASS  SUB CLASS  CLASS  THE  FOREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  COUNTRY  CLASS		(Use several sheets if necessary)								
EXAMINER  DOCUMENT NUMBER  DATE  NAME  CLASS  SUB CLASS  CLASS  SUB CLASS  PTU  5,206,590  04-27-1993  Dicny et al.  POREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  COUNTRY  CLASS  CLASS  SUB CLASS  CLASS						OUP				
INITIAL  DOCUMENT NUMBER  DATE  NAME  CLASS  CLASS  CLASS  CLASS  O4-27-1993  Dieny et al.  3-24  3-25  Dieny et al.  3-24  3-25  Dieny et al.  3-24  DOCUMENT NUMBER  DATE  COUNTRY  CLASS  CLASS  SUB  CLASS  CLASS  OTHER DOCUMENT NUMBER  DATE  COUNTRY  CLASS  CLASS  CLASS  CLASS  DOCUMENT NUMBER  DATE  COUNTRY  CLASS  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  DATE  COUNTRY  CLASS  DATE  COUNTRY  CLASS  CLASE  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS  CLASS										
FOREIGN PATENT DOCUMENTS  DOCUMENT NUMBER  DATE  COUNTRY  CLASS  SUB CLASS  CLASS  OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  Examiner:  Initial if citifion considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in	1	DOCUMENT NUMBER	DATE	NAME	CLASS					
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED	The	5,206,590 0	4-27-1993	Dieny et al.	324	252				
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED										
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED	1.									
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED										
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED										
TOTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  EXAMINER  DATE CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  TOTAL CONSIDERED  JOHN LEED  DATE CONSIDERED  JOHN LEED  TOTAL CONSIDERED										
DOCUMENT NUMBER  DATE  COUNTRY  CLASS  SUB CLASS  OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  ATTRIBUTED  DATE CONSIDERED  ATTRIBUTED  DATE CONSIDERED  ATTRIBUTED  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in										
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE  Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  DATE CONSIDERED  AUTHOR  DATE CONSIDERED  AUTHOR  Examiner: Initial if citifuon considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in		FOREIGN	PATENT [	DOCUMENTS						
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in		DOCUMENT NUMBER	DATE	COUNTRY	CLASS					
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in										
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in										
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in										
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in										
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 31  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in			<del></del>			<b>~</b>				
Ching Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording", IEEE Transactions on Magnetics, Vol. 30, No. 6, November 1994.  EXAMINER  DATE CONSIDERED  July 1 St.  Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in		OTHER DOCUMENTS (Includ	ling Author	Title, Date, Pertinent Pages, etc.)						
EXAMINER  DATE CONSIDERED  OUT  Examiner: Initial if cipation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in	<b>4</b> //	Ching Tsang et al., "Design, Fabrication &	& Testing o	of Spin-Valve Read Heads for High Den	nsity Recording", IF	EEE				
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in	pu	Transactions on Magnetics, Vol. 30, No. o	Transactions on Magnetics, Vol. 30, No. 6, November 1994.							
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in	<del>-(</del>	+-+	<del></del>	<u> </u>						
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in										
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in										
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in										
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in					<u></u>					
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in						<del></del>				
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609: draw line through citation if not in	EXAMINER DATE CONSIDERED   121									
	J'FI F									